ARDEX WPM 715

Weldtec™ External Roofing Membrane

Compliant to AS 4654

Membrane will not shrink over lifespan

Excellent resistance to atmospheric pollution

Fast speed of install as no mechanical fixings required

Excellent resistance to ageing from heat, sunlight and ozone

Excellent resistance to geothermal gases including hydrogen sulphide and methane

WeldTec.™

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PRODUCT DESCRIPTION

ARDEX WPM 715 Weldable Waterproofing Membrane is specially formulated with properties that resist ageing from heat, sunlight, and ozone. ARDEX WPM 715 has excellent gas impermeability, remains flexible at low temperatures, and is suitable in all climatic zones.

ARDEX WPM 715 is ideal for use as a single layer membrane in both horizontal or vertical applications for UV exposed environments such as decks and rooftops.

FEATURES

- Compliant to AS4654.1

- Membrane will not shrink, and no mechanical fixings required

- Excellent resistance to ageing from heat, sunlight and ozone

- Suitable for use under decking & paver pedestal applications

- Excellent resistance to tearing, cracking, bubbling, and absorption

- Excellent resistance to geothermal gases including hydrogen sulphide and methane

SUBSTRATE PREPARATION

Suitable substrates include concrete, brick, plywood, CFC sheet, timber, and paper-faced plasterboard.
NOTE: The use of LOSP (Light Organic Solvent Preservative) treated plywood must NOT be used under ARDEX WPM 715 in any circumstances.

By way of mechanical methods and vacuum cleaning as necessary, remove all dirt, dust, curing compounds, oils, grease, surface sealers, and any other contaminants prior to membrane installation. Prepare surface to leave sound, clean, dry, free from sharp edges, loose or other materials which may damage the membrane.

Damaged concrete between 2mm - 30mm can be treated with ARDEX A 46. Spalling concrete must be treated accordingly with the ARDEX Concrete Repair range such as ARDEX BR 345, please review the respective product data sheets on treating spalling concrete.

DAMP OR GREEN CONCRETE

When masonry or concrete substrate moisture content is measured at greater than 80% relative humidity (ASTM F2170) or exceeds 15gm/m²/24hrs (ASTM F1869) when tested in accordance with AS 1884 or AS 3740, ARDEX WPM 300 (HydrEpoxy) shall be considered as the nominated primer prior to ARDEX WA 98 Adhesive. This is typically equivalent to 5% or greater moisture content from a digital non-destructive moisture meter, however Australian Standards must be followed.

Apply two coats of ARDEX WPM 300 (HydrEpoxy) at a rate of 3m²/litre (per coat) and allow to dry for a minimum of 24 hours. Drying times will vary depending on substrate temperatures and ambient air conditions. Once the ARDEX WPM 300 (HydrEpoxy) has cured, apply a neat primer coat of ARDEX WA 98 Adhesive and allow to totally dry. Apply another neat coat of ARDEX WA 98 Adhesive to the primed substrate and to the sheet underside, then bring together once tacky.

NOTE: If the ARDEX WPM 300 (HydrEpoxy) is not allowed to fully cure, the application of ARDEX WA 98 Adhesive will noticeably damage the uncured ARDEX WPM 300 (HydrEpoxy).

COMPRESSED FIBRE CEMENT SHEETING

Compressed fibre cement sheet must be installed as per manufacturer's instructions. Substrate to be primed with ARDEX WA 98 Adhesive.

DETAILING

The ARDEX Flashing Tape is to be used in all external corners, pipe penetrations, and drainage waste outlets. The ARDEX Flashing Tape is to be cut to size and adhered with ARDEX WA 98 Adhesive during installation. Once correctly installed, the ARDEX WPM 715 shall be glued and heat-welded to the ARDEX Flashing Tape to create a seamless waterproofing membrane system within and around critical areas.

Prior to any of the below products being applied directly onto ARDEX WPM 715, the following surface preparation steps must be used. This will aid in the adhesion of ARDEX approved ancillary products.

1. Where ancillary ARDEX products are being directly applied, solvent wipe surface area of ARDEX WPM 715 and allow to flash-off.

2. Scrub ARDEX WPM 299 Seam Primer into the solvent wiped area and allow to completely dry.

Approved ARDEX products:

- ARDEX STB / STA Tape

- ARDEX Water-Based Membranes / Protective Coatings

- ARDEX RA 050 (membrane termination purposes)

- ARDEX RA 88 PLUS (membrane termination purposes)

- ARDEX CA 20 P PLUS (membrane termination purposes)

SUBSTRATE RECTIFICATION

To create a smooth substrate for the ARDEX WPM 715 membrane, ARDEX suggest to apply a slurry coat of ARDEX 405/cement to the prepared concrete substrate. Mix to a thin slurry and spread the mix over the prepared surface with brush, roller, squeegee, or soft bristle broom. Maximum slurry coat thickness recommended is 2mm.

Slurry coat mix ratio (by volume):
1 part ARDEX WPM 405: 1 part water: 4 parts cement

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SUBSTRATE ADHESIVE

ARDEX WA 98 Adhesive is a ready to use solvent-based external contact adhesive for bonding ARDEX Wedltec™ membranes.

With a brush or roller apply ARDEX WA 98 Adhesive to both the sheet underside and the substrate at a rate of 4m² - 8m²/litre, and allow approximately the same drying time. Drying times will vary depending on substrate temperatures and ambient air conditions. Once the applied ARDEX WA 98 Adhesive becomes tacky to touch then it is ready for bedding. The ARDEX WA 98 Adhesive can be reapplied if the drying time elapses.

To create optimum adhesion, apply a neat primer coat of ARDEX WA 98 Adhesive to the prepared substrate and allow to totally dry. Apply another neat coat of ARDEX WA 98 Adhesive to the primed substrate and underside of sheet, then bring together once tacky.

It is highly suggested to shake and stir the unopened ARDEX WA 98 Adhesive drum to thoroughly mix contents before use.

Ensure not to apply ARDEX WA 98 Adhesive over an area that will later be spliced or seamed to another sheet or flashing as you will not be able to weld glued laps and seams. ARDEX WA 98 Adhesive for external use only.

INSTALLATION

The application of ARDEX WPM 715 must be carried out by an ARDEX Accredited Applicator. Installation shall be in strict accordance with the manufacturer's recommendations.

Roll out ARDEX WPM 715 and cut to the measured length. Smooth ARDEX WPM 715 on contact to minimise air entrapment beneath the membrane. To ensure proper adhesion, compress the bonded portion of the sheet to the substrate with a pressure roller.

Without over-stretching the membrane, ensure the ARDEX WPM 715 is laid tightly into all corners and transitions, this can be greatly assisted with the use of the ARDEX Brass Roller and the ARDEX Small Hand Roller. All transition substrate gaps must be filled appropriately to adequately support the ARDEX WPM 715. Membrane shall be installed with a minimum 40mm overlap (both side and end laps) and heat welded using an approved hot-air welding unit. Solvent wipe the membrane and allow to dry before heat welding all seams and laps. Using a probe, ensure all seams and laps are welded properly; re-weld if necessary.

It is highly suggested to use either a weighted roller or large water filled heavy roller once the membrane is installed to ensure uniform substrate adhesion.

MEMBRANE TERMINATION

Membrane termination detail to be in accordance with AS 4654 or ARDEX recommendation - please consult ARDEX Technical Department for further information (technicalservices@ardexaustralia.com).

Vertical Termination Finishing

The ARDEX Weldtec™ membrane shall be terminated with one of the suggested options.

Option 1:
The termination with an ARDEX Pressure Seal Strip shall be attached onto the wall using appropriate mechanical fixings at maximum 150mm centres. ARDEX RA 050 shall be used along the top edge of the ARDEX Pressure Seal Strip to the waterproof wall. Membrane termination height to be in accordance with AS 4654 Appendix A.

Option 2:
The termination of an Over-Flashing shall be sealed into the waterproof wall via a minimum 15mm x 15mm reglet. The Over-Flashing must be fixed in place with either ARDEX RA 88 PLUS or ARDEX RA 050 or ARDEX CA 20 P PLUS. Membrane termination height to be in accordance with AS 4654 Appendix A.

Option 3:
Terminate the membrane directly into a minimum 15mm x 15mm reglet. The part of ARDEX WPM 715 membrane being inserted into the reglet must be solvent wiped and allowed to flash off. ARDEX WPM 299 Primer must then be applied to the solvent wiped area and allowed to dry. Once the ARDEX WPM 715 has been appropriately installed into the reglet, the termination (reglet) shall be filled with either ARDEX RA 88 PLUS or ARDEX RA 050 or ARDEX CA 20 P PLUS and tooled off. Membrane termination height to be in accordance with AS4654 Appendix A.

Horizontal Termination Finishing

The termination of the ARDEX WPM 715 shall be terminated into the concrete substrate via a minimum 15mm x 15mm reglet. The part of ARDEX WPM 715 membrane being inserted into the reglet must be solvent wiped and allowed to flash off. ARDEX WPM 299 Primer must then be applied to the solvent wiped area and allowed to dry. Once the ARDEX WPM 715 has been appropriately installed, the termination (reglet) shall be filled with an ARDEX approved product such as:

• ARDEX RA 88 PLUS

• ARDEX RA 56

• ARDEX WA 100

• ARDEX EG 800 F

• ARDEX RA 142 / ARDEX RA 144

Dependent on reglet size and length, ARDEX suggest both products ARDEX RA 56 and ARDEX EG 800 F to be bulk filled with ARDEX Aggregate. All remaining termination details such as vertical downward, parapet capping, cavity flashing, external door opening etc refer to AS 4654.

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DECKING & PAVER PAD INSTALLATION

Timber decking or paver pad (tiling pedestal) are to be installed as per manufactures recommendations. When placing the decking cradles or tiling pedestals onto the waterproofing membrane it is highly recommended to place rubber matting under each support to greatly reduce potential damage to the waterproofing membrane and prolong the service life of the waterproofing membrane.

BOSS Tiling Pedestals from DTA Australia are an approved system to be used with ARDEX Weldtec™ Waterproofing Membranes. Visit www.dta-aus.com.au for more information.

PACKAGING

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Roll size: 1.4m wide x 20m long

Approximate weight per roll: 53kg

TECHNICAL DATA

CHARACTERISTICS	TEST METHOD	NOMINAL VALUES
Membrane Gauge		1.5mm
Colour		Dove Grey or Black
Service Temperature		-30°C - 80°C
Abrasion Resistance	AS 1580.403.2	0.04mm
Bond Strength	ASTM C794	Concrete: 25N Plywood: 18N
Cyclic Movement	CSIRO Moving Joint Test	Pass
Dimensional Stability	ASTM D6207	<1mm (Pass)
Durability	AS 4654.1 Table A4	Pass
Elongation at break	AS4654.1	>300%
Heat Ageing	AS/NZS 4858	> 6.33 MPa >300%
Hydrogen Sulphide Resistance	EN 1847	Pass
Hydrogen Sulphide Permeability	ASTM D1434	2.72156E-06 cm3*cm/(cm²*s*atm)
Ozone Resistance	ASTM D1149	Pass
Tear Strength	ASTM D624	Pass
Temperature Resistance	AS 4654.1	Pass
Tensile Strength	AS 4654.1	> 3.93 MPa
Ultraviolet Resistance	AS 4654.1	Pass (>4224 hours QUV exposure)
Use with Potable Water	AS/NZS 4020:2005	Pass
Water absorption	AS 3558.1	0.05%
Water vapour transmission rate	ASTM E96	0.07 g/m2/24 hours

STORAGE

ARDEX WPM 715 has an indefinite shelf life when stored in good conditions, between 5°C and 30°C. Rolls must be stored horizontally, out of direct sunlight, away from sources of puncture and physical damage, away from ignition sources and open flame.

LIMITATIONS

The application of ARDEX WPM 715 must be carried out by an ARDEX Accredited Applicator. ARDEX WPM 715 waterproofing membrane can withstand light maintenance foot trafficable environments, but is not suitable within a medium to heavy trafficable environments. ARDEX WPM 715 shall not be laid under tension in any circumstances. Do not apply any ARDEX engineered screeds directly to ARDEX WPM 715. It is the responsibility of the main building contractor to ensure all sub-trades likely to be working in the vicinity of the ARDEX WPM 715 membrane are aware that a waterproofing membrane has been installed and all care must be taken to protect the membrane from damage.

Before any substrate preparation, installation or finishing methods relating to ARDEX product are undertaken, please be aware of any potential risks and use appropriate PPE (personal protective equipment). This may involve contacting substrate manufacturers for Safety Data Sheets.

GUARANTEE

ARDEX Australia Pty Ltd ("we" or "us") guarantees this product ("our goods") is free from manufacturing defects and will perform to any applicable specification published by us for 20 years from the date of purchase. Our liability under this guarantee is limited at our option to replacement of the product, repair of any damage to the immediate surface or area of application of the product, or compensation, in each case if we are satisfied loss or damage was due to a breach of this guarantee. This guarantee does not apply if damage or loss is due to failure to follow published instructions or any act or circumstance beyond our control, including shade variations and efflorescence. If you wish to make a claim under this guarantee you must notify us (ARDEX Australia Pty Ltd, 2 Buda Way Kemps Creek NSW 2178; Toll Free: 1800 224 070; Email: technicalservices@ardexaustralia.com) and provide evidence of your purchase of the product within 30 days of any alleged loss or damage occurring. We reserve the right to ask you for satisfactory evidence of any alleged loss or damage. Any claim under this guarantee is at your cost. This guarantee is in addition to any rights or remedies you may have as a "consumer" under the Australian Consumer Law and to that extent you need to be aware that: "Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss of damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure".

DISCLAIMER

The technical details, recommendations and other information contained in this data sheet are given in good faith and represent the best of our knowledge and experience at the time of printing. It is

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your responsibility to ensure that our products are used and handled correctly and in accordance with any applicable Australian Standards. Our instructions and recommendations are only for the uses they are intended. Users are advised to confirm that this product is suitable for their application and conforms with the specifications of the system. We also reserve the right to update information without prior notice to you to reflect our ongoing research and development program. Country specific recommendations, depending on local standards, codes of practice, building regulations or industry guidelines, may affect specific installation recommendations. The supply of our products and services is also subject to certain terms, warranties and exclusions, which may have already been disclosed to you in prior dealings or are otherwise available to you on request. You should make yourself familiar with them.

This data sheet was issued in May 2025 and is valid for 3 years, in some instances a newer version may be published. Always refer to www.ardexaustralia.com for the latest technical data from ARDEX Australia Pty Ltd.